

ABSTRACT

A sputtering target that is a perovskite oxide represented by the chemical formula of $Ra_{1-x}A_xBO_{3-\alpha}$ (wherein Ra represents a rare earth element consisting of Y, Sc and lanthanoid; A represents Ca, Mg, Ba or Sr; B represents a transition metal element such as Mn, Fe, Ni, Co or Cr; and $0 < x \leq 0.5$) and having a relative density of 95% or more and a purity of 3N or more. The above target comprising a perovskite oxide ceramic material is improved in density and exhibits enhanced strength, and thus can prevent the occurrence of fractures or cracks during the manufacture process, transfer process or sputtering operation of the target, which results in the improvement in yield. This target can further inhibit the generation of particles during deposition, which results in the improvement of the quality of the film and in the reduction of the generation of defective products.